

Amendments to the Specification:

Please replace the paragraph at page 1, lines 4-6, with the following amended paragraph:

The invention related to a method and an apparatus for welding and in particular contour-welding three-dimensional molded articles, ~~comprising the features in the preamble of claims 1 and 8.~~

Please replace the paragraph at page 4, lines 13-23, with the following amended paragraph:

This radiation source works in favour of heating up the second join partner, which is regularly the upper, so-called "top-layer" of the welding area, thus homogenizing the temperature field in the welding area on both sides of the welding level and rendering it more symmetric. Such a homogenized temperature field will expand the process window, and the process becomes less prone to malfunctions due to difficulties that are occasioned by the irregular clamping stress field in particular with large three-dimensional contours. In this regard, based on the method according to the invention and the corresponding apparatus ~~as characterized by the characteristics of claims 1 and 8,~~ the clamping technique per se does no longer constitute the limiting factor of a three-dimensional welding process.

In re of: HOFMANN10

Please replace the paragraph at page 4, line 25, to page 5, line 2, with the following amended paragraph:

The preferred developments ~~according to claims 2 to 10~~ help attain an especially selective temperature increase of the second join partner. Owing to the different wavelengths of the laser welding beam and the secondary radiation, the thermally effective secondary radiation can be fitted in wavelength to the respective layer to be heated or melted and the radiation absorption conditions there prevailing.

Please replace the paragraph at page 5, lines 4-10, with the following amended paragraph:

Although the secondary radiation may basically also be produced by a second laser, cost reasons speak against this in the field of industrial application. Rather, infrared or UV radiators are preferred ~~according the claims 3 and 11,~~ their radiation being better absorbed by many uncoloured plastics than are customary laser welding wavelengths of for example 780 to 1000nm. Special preference applies to short-wave secondary radiation produced by a halogen infrared radiation source ~~as seen in claims 4 and 12.~~

Please replace the paragraph at page 5, lines 12-23, with the following amended paragraph:

When simultaneous radiation of the two join partners is mentioned in the independent claims, this does not mean that the radiation periods must be absolutely simultaneous. Rather it must be ensured that the laser welding beam will act on the join partner, in particular the partner that is to be melted, at a time at which significant interaction with the area, of increased temperature by secondary radiation, of the join partners can take place in the sense of homogenization of the temperature field and enlargement of the process window. In this regard, according to preferred embodiments of the method according to the invention and the corresponding apparatus, the secondary radiation can be applied substantially concentrically and synchronously of the laser welding beam or leading ahead thereof ~~as specified in claims 5 and 6 and 13 and 14, respectively.~~

Please replace the paragraph at page 5, lines 25-26, with the following amended paragraph:

For increased efficiency of the secondary beam source, it is advantageous to focus the secondary radiation ~~(claims 7 and 15).~~

Please replace the paragraph at page 5, line 28, to page 6, line 5, with the following amended paragraph:

In re of: HOFMANN10

In keeping with another preferred embodiment, the invention provides, ~~according to claims 8 and 16,~~ to apply the secondary radiation and/or the laser welding beam by a clamping device that is transmissive thereto, in particular a clamping device roller. This is accompanied with the advantage that the clamping device acts directly on the currently activated welding area, whereby component tolerances are being compensated optimally and corresponding joining gaps are reduced to a minimum.